acid neutralised by any alkali, or by phosphate of soda, the fluid becoming more acid when boiled. A solution of earthy phosphates in biphosphate of soda also gives a precipitate on boiling, if some of its acid reaction is removed by any alkali. The fluid when boiled becomes more acid to test-paper, indicating the formation of a more basic earthy phosphate. A result precisely similar is obtained when common phosphate of soda, phosphate of lime, and a little biphosphate of soda exist together in solution; and by varying the quantities of each of these substances, the various phenomena which the urine occasionally presents may be imitated. The time at which the alkalescence of the urine from fixed alkali generally occurs, indicates the existence of some alkaline phosphate, or of some carbonated alkali in the food.

"On the Nerves of the Uterus." By Thomas S. Beck, Esq. Communicated by Sir Benjamin C. Brodie, Bart., F.R.S.

The object of the author in this communication is to record the results of his dissections of the nerves of the uterus, both in the unimpregnated and gravid states, with a view to determine if any changes are observable in them in these two conditions. He enters minutely into the anatomical details of the formation of the great splanchnic nerve, the composition of the semilunar ganglion, and the distribution of the branches proceeding from it to the different abdominal viscera. His conclusions are, that while the ovaria derive their nerves from the renal, the fallopian tubes from the hypogastric, and the bladder, rectum and vagina from the pelvic plexus, the nerves supplying the uterus are continuations of the hypogastric plexus, and that they undergo, during pregnancy, no further change, either in size or position, except that which is the simple consequence of the enlargement of the organ over which they are distributed, and that they undergo no other change during a second pregnancy. He thinks it probable, moreover, that the vessels of the uterus do not decrease in size after parturition, but are only contracted in their cavity. He notices several points relating to these subjects, which are still open to further investigation. The paper is accompanied by highly finished drawings of the appearance of the dissected parts.

"On a Peculiar Source of Deterioration of the Magnetic Powers of Steel Bars." By William Sturgeon, Esq. Communicated by S. Hunter Christie, Esq., Sec. R.S.

The author concludes, from various experiments on the changes in the magnetic force of steel magnets produced by subjecting them to blows with a wooden mallet, or other modes of creating tremors or vibrations among their particles, that the most apparently trifling mechanical agitation is sufficient to occasion a considerable diminution of magnetic power; that this loss, when it has taken place from such a cause, is permanent; and that in every case, after reaching a certain point, it attains its maximum, a fact which implies, in every magnet, the possession of a specific retentive force, of which it cannot be deprived by any further mechanical commotion of its parti-